

**TECHNICAL SUPPORT DOCUMENT
FOR SIGNIFICANT PERMIT REVISION NUMBER 45647
TO TITLE V PERMIT 36183
SNOWFLAKE WHITE MOUNTAIN POWER, LLC**

I. INTRODUCTION

This Significant Permit Revision is issued to Snowflake White Mountain Power, LLC (SWMP) for the operation of a 22 Megawatt (MW) wood-fired generating station in Snowflake, Navajo County, Arizona. The facility was issued a Class I permit (Number 36183) in February 2006. A Minor Permit Revision, Number 40012, was issued to the company on July 19, 2006.

A. Company Information

Mailing Address: 4801 E. McKellips Rd, Ste 103, Mesa, AZ 85215
Facility Address: 140 West of Snowflake, 277 Spur, Snowflake, AZ 85937

B. Attainment Classification

The facility is located in an attainment area for all criteria air pollutants.

C. Learning Site

There are no learning sites within two miles of the facility.

II. SIGNIFICANT REVISIONS DESCRIPTION

This significant revision revises the Title V permit to allow SWMP to burn natural gas in the boiler to maintain the appropriate temperature of the fluidized bed. The facility is already authorized to burn natural gas as a startup fuel. This change does not increase emissions from the facility, as burning natural gas will result in lower emissions. However, to ensure that the facility does not trigger any additional requirements under Title 40 of the Code of Federal Regulations, part 60 (40 CFR 60), subpart Db, two natural gas usage limits are being added to the permit. These voluntary requirements require this revision to be processed as a significant revision.

With the addition of the natural gas usage limits, the facility is no longer subject to the nitrogen oxides limit in 40 CFR 60.44b. This revision also removes those conditions associated with nitrogen oxides in minor permit No. 40012.

The annual wood fiber maximum heat input is also increased from 912,354 MMBTU per 12 months to 1,033,000 MMBTU per 12 months. This change will not increase emissions because overall maximum heat input will remain limited to 2,971,777 MMBTU per rolling 12 month period.

See attached calculations.

III. APPLICABLE REGULATIONS

This revision does not change the regulations that are applicable to the facility (i.e. 40 CFR 60, subpart Db). However, as discussed above and below, the nitrogen oxides limit and subsequent monitoring, recordkeeping, reporting, and testing requirements will no longer apply to the facility. The specific requirements that are being removed from the Title V permit are 40 CFR 60.44b(l)(1), 44b(h), 44b(i), 46b(c), 46b(e)(1), 46b(e)(2), 48b(c), 48b(d), 48b(e), 48b(f), and 49b(g).

IV. REVISED PERMIT CONDITIONS

A. Revised Permit Conditions

TABLE 1: Revised permit conditions

Permit Condition	Determination				Remarks
	Delete	Keep	Revise	Streamline	
Attachment "B" Section IIB.1.c.i			√		The annual maximum heat input for wood fiber raise to <u>1,033,000 MMBTU/yr</u> however the overall maximum heat input facility wide will remain at <u>2,971,777 MMBTU/yr</u>
Attachment "B" Section II.B.d.iii and II.C.14			√		A 30-day rolling average of natural gas usage limit is added.
Attachment "B" Section II.C.3			√		Record keeping for amount of wood waste, wood fiber, and natural gas combusted in the boiler.
Attachment "B" Section			√		Semi-annual reporting for SO ₂ , NO _x , CO and opacity may be submitted for same periods as the required semi-annual compliance reports
Attachment "B" Section III.B.3.ii			√		NSPS regulation for opacity span value of 60-80
Attachment "B" Section III.B.4.c, C.4.c, D.3.c, F.2.c			√		Alternative test methods may be used with approval of director
Attachment "B" Section III.G.1.c and G.1.d	√				Delete HAPs annual limits.
Attachment	√				Delete Monthly Calculations

"B" Section III.G.2.a					
Attachment "B" Section IV			√		Cooling Tower Requirements – updated to reflect the most recent permitting format and language
Attachment "B" Section IV			√		Mobile Source Requirements – updated to reflect the most recent permitting format and language
Attachment "B" Section IV			√		Other Periodic Activity Requirements – updated to reflect the most recent permitting format and language

V. MONITORING, RECORDKEEPING, REPORTING, AND TESTING REQUIREMENTS

An additional requirement to calculate and record a 30-day rolling average of the natural gas heat input as a percentage of the combustion of all fuels has been added to the permit to ensure that the voluntary natural gas usage limits are met.

This revision also removes the monitoring, recordkeeping, reporting, and testing requirements for nitrogen oxides from 40 CFR 60.46b and 48b. The monitoring, recordkeeping, reporting, and testing requirements from the original Title V permit (36183) are being added back to the permit. The Permittee is required to install a continuous emissions monitoring system to monitor and record the emissions of nitrogen oxides, carbon monoxide, sulfur dioxide and opacity on a continuous basis. In addition, annual performance tests for particulate matter, nitrogen oxides sulfur dioxide and carbon monoxides must be conducted each year.

This revision does not change any other monitoring, recordkeeping, reporting, and testing requirements in the permit.